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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,172	11/25/2000	Kia Silverbrook	NPS022US	3860
24011	7590	12/29/2004	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			ABDULSELAM, ABBAS I	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/722,172	Applicant(s) SILVERBROOK ET AL.	
	Examiner Abbas I Abdulsalam	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 3-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (USPN 6152370) in view of Ehrhart et al. (USPN 6304660), and LaGrange et al. (USPN 5914708)

Regarding claim 1, Ackley teaches as shown in Fig. 1, a data collection symbology reader (50) including a light source (52), a sensor (54), a receiver or converter (56), processor and (60) and memory (57). See Fig. 1 Ackley discloses that the reader (50) is constructed to read and decode a bar code symbol (53) or "data collection symbols" formed as relief pattern on surfaces (col. 6, lines 1-3). Ackley defines "data collection symbols" to mean a symbol from any linear, stacked, area and other machine-readable symbology (col. 5, lines 34-39). Ackley indicates that all elements in a given profile can be identified and subsequently decoded. See col. 3, lines 47-67 and col. 1-3. Ackley teaches that a processor (60) identifies portions of a large

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shape signal (received from a receiver) corresponding to resolved shapes and spaces, generates an unresolved element matrix in response to the large shape signal, and produces a signal indicative of the information encoded based on the unresolved element matrix. See col. 4, lines 39-45 Referring to Fig. 3, Ackley shows that the sensor (54) having an imaging lens (221) and an array of photo- detectors (222) producing a signal analogous to a reflectance profile (Fig. 4B). Ackley defines a profile to mean analog signal corresponding to a spatial representation of bars and spaces in a relief formed symbol. See col. 6, lines 37-59. In addition, Ackley's symbology reader (50) includes a sensor (54), which can be one or two-dimensional CCD, semiconductor array, vidicon or other area imager. See col. 5, lines 53-55.

However, Ackley does not teach generation of "region data indicative of the identity of the region using the coded data".

Ehrhart on the other hand teaches an apparatus including a material detection imaging assembly, which may detect material on a document by detecting transmissivity characteristics, or by sensing radiation emission characteristics of the document. Ehrhart teaches a controller of the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. For example, referring to Fig. 3.1, Ehrhart teaches a system (302) is adapted to capture images that can be processed to determine the regions in a play area of a game ticket in which scratch-off material has been removed (col. 9, lines 48-51). Ehrhart discloses a system (330) including scratch of material (331) of a game ticket (202-3-4) that is provided with an additive that emits radiant energy in a second band of wavelength when radiated by radiant energy in a first band of wavelengths. Ehrhart illustrates that the system (330) is controlled by a processor-based control unit which controls a 1.times.N pixel array image sensor, and captures

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image data from image signals generated by sensor (334). Ehrhart adds that the controller also controls a transport mechanism for transporting a document across a field of view of sensor so that controller can construct 2D images from 1D "slice" image signals generated by sensor (334). Such a See Fig. 3-4, Fig. 3-5 and col. 11, lines 13-50.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's symbology reader (50) to adapt Ehrhart's detection system (Fig 3.4) including the use of a sensor (334) and a surface (202-3-4) as configured in the Figure. One would have been motivated in view of the suggestion in Ehrhart that utilizing the sensor (334) along with the surface (202-3-4) can be equivalently used to generate "region data indicative of the identity of the region using the coded data". The use of a sensor (334) helps optically read lottery game tickets as taught by Ehrhart.

However, Ackley does not teach, "an attachment arrangement adapted to facilitate attachment and detachment of the device to and from a writing implement having a nib, the sensing device being adapted to sense coded data at least when the nip is in contact with the surface." LaGrange on the other hand teaches a stylus in actuated position as shown in Fig. 4 (A-B), and a stylus with a cover disposed over the stylus tip as shown in Fig. 5. Referring Fig. 5. LaGrange teaches a foam cover (60) slipped over the stylus tip (40) functioning the same way (amplify capacitive disturbances which is sensed by the touch pad (30)) as the one in Fig. 4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ackley's coding and decoding system to adapt LaGrange's foam cover (60) in a way applicable in Ackley's device. Because both Ackley and LaGrange teach

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about sensing devices and one of ordinary skill in the art would have looked toward LaGrange for the manner by which the sensing device is implemented.

Regarding claims 3, LaGrange teaches the use of foam cover (60) and indicates that those skilled in the art will understand some appropriate foam materials which can be used for this purpose. See col.8, lines 2-5.

Regarding claims 4-5 and 7-8, see LaGranges's Fig. 5

Regarding claim 13, Ackley teaches the use of data collection or bar symbol (53), which refers to a symbol from any linear, stacked, area and other machine-readable symbology. See col. 5, lines 34-46. It would have been obvious that "machine readable symbology" is a phrase wide enough to include tags as coded data.

Regarding claim 14, Ehrhart teaches a sensor (334), and a controller of the apparatus that is in communication with a lookup table correlates ticket identification codes with indicators. (see abstract)

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Ehrhart et al, LaGrange and in further view of Wilson et al. (USPN 5434370).

Regarding claim, 6, Ackley as modified does not teach a calibrator "for calibrating the device such that the information indicative of the distance between a writing portion of the writing implement and the detector is incorporated in the region identity." Wilson on the other hand teaches calibration strips (22a, 22b, 22c 22d) for interacting with the laser beams for the

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purpose of providing reference end points from which to track (X, Y) movement of the implement (14), and to provide information regarding the position of the radiation relative to the writing surface. See col. 4, lines 43-49 and Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to further modify Ackley's modified symbology reader (50) system to include Wilson's use of calibration strips (22a, 22b, 22c, 22d) as shown in Fig. 1. One would have been motivated in view of the suggestion in Wilson that the calibration strips are functionally equivalent to the desired calibrator. The use of calibration strips helps function field responsive graphic data acquisition system (10) as a taught by Wilson et al.

4. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in Ehrhart et al, Lagrange and in further view of Teufel et al. (USPN 6243503).

Regarding claim 9, Ackley as modified does not teach the "movement of data" defined as indicative of the sensing device's movement relative to the region. Teufel on the other hand teaches a motion detector unit (202) for recording the given position of the data acquisition device (200) relative to the image plane (20) and photodiodes (229, 230) intended for detecting the movement the data acquisition device. See col. 10, lines 13-19, 64-67, col. 11, lines 1-4, Fig. 17, (202), Fig 18B and Fig. 19(A-B).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ackley's modified method of decoding data collection symbols to further modify by adapting Teufel's motion detector (202) along with the use of

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photodiodes (229, 300). One would have been motivated in view of the suggestion in Teufel that the motion detector with photodiodes serve the same purpose and can be equivalently used to obtain the desired sensing device's movement and position relative to the surface. The use of motion detector and photodiodes helps function data acquisition device more effectively as taught by Teufel et al.

Regarding claim 10, Teufel teaches the process in which recognition and translation of handwritten information into electrically readable information takes place. See col. 11, lines 60-67 and col. 12, lines 1-2. Teufel discloses photodiodes (229, 229') on the one hand, and photodiodes (229', 229' ") on the other each detecting a signal from the line of alphanumerical characters.

Regarding claims 11-12, Teufel teaches that as the data acquisition device (200) moves parallel with a marked surface, a pattern of signals is produced in the diode array. Teufel further indicates that such a pattern along with suitable data processing means can be used to determine the direction and the speed of the motion of the reading device. It would have been obvious the same concept can be uses to determine the acceleration of the device.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 3-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-4, 7-11, 22-24 and 28-29 of U.S. Patent No. 6737591. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 1 of the present application is met by claims 1, 4 and 28-29 of the patent. It would have been obvious "attachment and detachment of the device" as used in the present application is equivalent and corresponds to a "housing", "a region identity sensor" and a "stylus or a pen" as used in claims 1, 4 and 29, respectively of the patent. It would have been obvious for one of ordinary skill in the art to ascertain that for a stylus or pen to be coupled and configured in the form of housing, it dictates some form of attaching/detaching mechanism.

Claims 3-5 and 7-8 of the present application are met by claim 29 of the patent.

Claim 6 of the present application is met by claim 11 of the patent.

Claims 9-10 of the present application are met by claim 7 of the patent.

Claim 11 of the present application is met by claim 22 of the patent.

Claim 12 of the present application is met by claim 23 of the patent.

Claim 13 of the present application is met by claim 8 of the patent.

Claim 14 of the present application is met by claim 24 of the patent.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulselem** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

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Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

Art Unit 2674

December 22, 2004


XIAO WU
PRIMARY EXAMINER